

L 44218-66

ACC NR: AP6017997

moving part, paired knife-edges are mounted beneath the moving part on top of the stationary part. [KP]

SUB CODE: 13/ SUBM DATE: 19Feb65/

RUMYANTSEV, A.V., kand. tekhn. nauk

Specification of quantitative indices of the reliability of
machinery. Standartizatsiia 29 no. 11:13-14 N '65
(MIRA 19:1)

RUMYANTSEV, A.V., kand.tekh.nauk

Quantitative indices of the reliability of universal shovel
excavators. Mekh.stroi. 19 no.12:16-17 D '62. (MIRA 15:12)
(Excavating machinery)

RUMYANTSEV, A. V., kand. tekhn. nauk

Organization of services for increasing the durability and
reliability of construction and road machinery. Stroi. i dor.
mash. 7 no.11:24-25 N '62. (MIRA 16:1)

(Construction equipment) (Road machinery)

BALAKSHIN, O.B., kand. tekhn. nauk; BYKHOVSKIY, M.L., prof., doktor tekhn. nauk; VOLODIN, Ye.I., kand. tekhn. nauk; GRIGOR'YEV, I.A., kand. tekhn.nauk; DRAUDIN-KRYLENKO, A.T., inzh.; IVANOV, A.G., kand. tekhn.nauk; KOZLOV, M.P., kand. tekhn. nauk; KOROTKOV, V.P., prof.; KOCHENOV, M.I., kand. tekhn.nauk; KUTAY, A.K., kand. tekhn. nauk; MARKOV N.N.,kand. tekhn. nauk; PALEY, M.A., inzh.; RAYEMAN, N.S., kand. tekhn.nauk; ROSTOVYKH, A.Ya., kand. tekn. nauk; RUMYANTSEV, A.V., kand. tekhn.nauk; SARKIN, I.G., prof.; SMIRNOV, A.S., inzh.; TAYTS, B.A., prof., doktor tekhn. nauk; YAKUSHEV, A.I., prof., doktor tekhn. nauk; NESTEROV, V.D., inzh., nauchnyy red.; CHUDOV, V.A., inzh., nauchnyy red.; GAVPILOV, A.N., doktor tekhn.nauk, prof., red.; BLAGOSKLONOVA, N.Yu., inzh., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Manufacture of instruments and means of automatic control: a manual in five volumes] Priborostroenie i sredstva avtomatiki; spravochnik v piati tomakh. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Vol.1.[Interchangeability and engineering measurements] Vzaimozameniaemost' i tekhnicheskie izmereniia. 1963. 568 p. (MIRA 16:8)
(Electronic measurements) (Automatic control)

RUMYANTSEV, A.V., kand.tekhn.nauk

Basic trends in the modernization of building and road machinery.
Stroi, i dor.mash. 7 no.10:3-4 0 '62. (MIRA 15:11)
(Construction equipment) (Road machinery)

PHASE I BOOK EXPLOITATION

SOV/5061

Rumyantsev, Aleksandr Vasil'yevich

Tekhnologiya izgotovleniya konoidov (Manufacture of Camoids) Lenin-grad, Sudpromgiz, 446 p. 1960. 4,200 copies printed.

Scientific Ed.: P. I. Bulovskiy; Ed.: M. A. Aptekman; Tech. Ed.: N. V. Erastova.

PURPOSE: This book is intended for designers, process engineers, and inspection and shop personnel engaged in the manufacture of cams, eccentrics, and other precision parts; it may also be used by students in departments of instrument engineering at schools of higher technical education and tekhnikums.

COVERAGE: The book contains general information on three-dimensional cams or camoids, and includes data on their classification, engineering documentation, and the materials and processes involved in their manufacture. Machining methods, special tools and machine tools used, and quality inspection are also described. Particular attention is given to machine tools (including the copying milling

Card 1/8

Manufacture of Camoids

SOV/5061

machines) used for machining the working surface of camoids. The setting-up and operation of these machines are discussed. The author thanks V. V. Kulagin, Candidate of Technical Sciences, for advice, O. V. Shalayevskiy for reviewing the mathematical calculations, Senior Foreman P. B. Preobrazhenskiy for assistance in the experiments, innovator A. I. Rakoyed for practical assistance, and P. I. Bulovski, Doctor of Technical Sciences, for scientific editing. There are 101 references: 84 Soviet, 15 English, and 2 German.

TABLE OF CONTENTS:

Foreword	3
Ch. I. Basic Information on Camoids	5
1. Conception of a camoid	5
2. Classification of camoids and basic factors influencing their manufacturing process	13

Card 2/8

RUMYANTSEV, Aleksandr Vasil'yevich; KULAGIN, V.V., kand.tekhn.nauk,
retsenzent; BULOVSKIY, P.I., doktor tekhn.nauk, nauchnyy red.;
APTEKMAN, M.A., red.; ERASOVA, N.V., tekhn.red.

[Technological processes in machining conoids] Tekhnologiya
izgotovleniia konoidov. Leningrad, Gos. Soiuznoe izd-vo sudo-
stroit. promyshl., 1960. 446 p. (MIRA 13:12)
(Metal cutting)

RUMYANTSEV, A. V. Cand Tech Sci -- (diss) "Study of ~~the~~ problems of precision in the manufacture of conoids." Len, 1959. 19 pp (Min of Higher Education USSR. Len Polytechnic Inst im M. I. Kalinin), 150 copies (KL, 45-59, 147)

SOV/136-59-6-14/24

AUTHORS: Fomichev, I.A., Doctor of Technical Sciences,
Say, N.F., Rumyantsev, B.F., Engineers

TITLE: Tube-rolling of Aluminium Alloys in Tube-rolling Plants
(Prokatka trub iz alyuminiyevykh splavov na trub-
oprokatnykh ustanovkakh)

PERIODICAL: Tsvetnyye metally, 1959, Nr 6, pp 75 - 79 (USSR)

ABSTRACT: Experiments on hot rolling of alloys AMTs, AV, D1, D16 and V95 have been carried out at the Dnepropetrovsk Rolling Mill imeni Lenin. Alloys D1, D16 were homogenised at 490 ± 10 °C and V95 at 470 ± 10 °C for 12 hours to remove the brittle intermetallic phase in the grain boundaries. Plasticity of the alloys was measured in the range 300 - 460 °C. Figure 1 shows the influence of test temperature on plasticity, alloys AV, V95, D1 and D16 increasing in plasticity and AMTs decreasing in plasticity with increase in temperature. Figure 2 shows the stress to fracture against test temperature, D16 and D1 having the highest resistance to deformation and AV the lowest. Plasticity was also checked on a laboratory piercing mill. At 8, 10 and 12% reduction, fracture of the core was not observed on any samples of the alloys except V95 at 12%.

Card 1/2

SOV/136-59-6-14/24

Tube-rolling of Aluminium Alloys in Tube-rolling Plants

With 15% reduction, they all fractured except alloy D1. From the results the optimum temperatures for hot rolling were estimated as AMTs 390-420, AV 400-430, D1 350-380, D16 370-400 and V95 360-390 °C; and the reduction was not to exceed 10-12%. Finally, experiments under production conditions were carried out. The chemical compositions of the alloys are given in the table. It was shown that it was possible to obtain thin-walled tubes from thick-walled hollow specimens by hot-rolling on a high-production tube-rolling plant without any difficulty in all the alloys tested. Tubes can be produced from solid specimens of alloy AMTs by an operation on a piercing mill followed by a roll on a continuous mill. If it is proved economically more efficient to produce tubes in the other alloys by this method than by extrusion, special precautions must be taken to eliminate adherence of the metal to the plant. The load on the motors of the mills is 10-30% lower for rolling aluminium than for carbon steels. There are 2 figures, 1 table and 2 Soviet references.

Card2/2

GUREVICH, Vitaliy Borisovich, kand.tekhn.nauk; KAPILLO, I.A. inzh.,
retsenzent; RUMYANTSEV, B.M., red.; FEDYAYEVA, N.A., red.izd-va;
REMNEVA, T.T., tekhn.red.

[Building hydraulic structures of precast reinforced concrete;
calculations, analysis and execution of the operations] Stroi-
tel'stvo gidrotekhnicheskikh sooruzhenii iz sbornogo zhelezobetona;
raschety, issledovaniia i proizvodstvo rabot. Moskva, Izd-vo
"Rechnoi transport," 1961. 296 p.

(MIRA 15:2)

(Hydraulic structures)
(Precast concrete construction)

RUMYANTSEV, B.N. (Moskva)

Waves excited on the surface of an incompressible fluid by a
shock wave. Prikl. mat. i mekh. 24 no. 2:240-248 Mr-Apr '60.
(MIRA 14:5)

(Shock waves)

RUMYANTSEV, B.N.

On the theory of Cauchy-Poisson waves in the case of an inclined bank. Dokl. AN SSSR 135 no.2:287-289 N '60. (MIRA 13:11)

1. Vychislitel'nyy tsentr AN SSSR. Predstavleno akademikom A.A. Dorodnitsynm.
(Waves)

RUMYANTSEV, B.H. (Moskva)

Irregular movements of a heavy fluid on a sloping beach. Prikl.
mat.1 mekh. 24 no.3:554-557 My-Je'60. (MIRA 13:10)
(Beach erosion)

L 19548-65 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EMA(h) Pf-l/Feb EM

ACCESSION NR: AP5000278

S/0040/64/028/006/1127/1132

AUTHOR: Rumyantsev, B. N. (Moscow) B

TITLE: On the motion of a solid body containing cavities filled with viscous liquid

SOURCE: Prikladnaya matematika i mekhanika, v. 28, no. 6, 1964, 1127-1132

TOPIC TAGS: solid body motion, body-containing cavity, viscous liquid, oscillatory motion, attenuation motion

ABSTRACT: The motion of a solid body with cylindrical or spherical cavities filled with viscous liquid is studied. First, a body with a circular cylindrical cavity whose axis coincides with the axis of rotation is taken and its small oscillations due to a restoring moment proportional to the deviation are considered. An integro-differential equation of small oscillations is derived and an operational method is applied for its solution. The solution of this equation is obtained in the form of an integral which can be evaluated for particular values of the dimensionless parameters β and γ (β characterizes

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L 19548-65
ACCESSION NR: AP5000278

the relation between the viscosity and external forces, and γ characterizes the relation between the moments of inertia of a "solidified" liquid and of the body). The logarithmic decrement is calculated for $\gamma = 1.6$ and various values of β , and the results are represented graphically. The graph shows that the attenuation is maximal for a certain finite value of β and that it is equal to zero when $\beta = 0$ and $\beta = \infty$. The motion of the body when $\beta \rightarrow \infty$ (the liquid rotates almost as a solid body) is analyzed separately. The integro-differential equation for such motion is reduced to a third-order ordinary differential equation with a small parameter multiplying the highest-order derivative. The general solution is obtained, the logarithmic decrement of attenuation is calculated for $\gamma = 1.6$, and the attenuation curve is plotted for various β -values. The motion of a body having a spherical cavity filled with a liquid whose center coincides with the center of mass of the body and with its fixed point is also analyzed. The equation of motion of elongated and oblate axially symmetric bodies is solved for $\beta \rightarrow \infty$. Orig. art. has: 2 figures and 11 formulas.

ASSOCIATION: None

Card 2/3

LEBEDEV, V.N.; RUMYANTSEV, B.N.

Variational problem of the flight between two points in a
central field, Isk. sput. Zem. no.16:252-256 '63.
(MIRA 16:6)

(Mechanics, Celestial)
(Artificial satellites)

RUMYANTSEV, B. N.

Cand Phys-Math Sci - (diss) "Several problems on the motion of non-compressible liquid under the influence of shock wave." Moscow, 1961. 7 pp; (Moscow Physics-Technology Inst); 130 copies; price not given; (KL, 6-61 sup, 195)

S/207/63/000/001/019/028
E191/E135

AUTHOR: Rumyantsev, B.N. (Moscow)

TITLE: On a limiting case in the propagation of powerful explosion waves within a non-uniform medium

PERIODICAL: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no.1, 1963, 127-129

TEXT: The problem studied is that of a cylindrical explosion in a non-uniform gas. Previously, solutions have been given for media with an arbitrary ratio of specific heats but confined to small non-uniformity so that only a linear approximation was examined with the exception of A.S. Kompaneyets who, in a paper on point explosion in a non-uniform atmosphere (Dokl. Ak.Nauk SSSR, v.130, no.5, 1960) proposed an approximate method for solving the non-linear problem. The present analysis deals with the non-linear problem on the assumption that the ratio of specific heats is near unity. In a cylindrical explosion, the problem becomes two-dimensional. It is known that, in a uniform medium, the pressure within the space occupied by the disturbed gas becomes uniform and the entire mass of the gas is concentrated near the wave front.
Card 1/2

On a limiting case in the ...

S/207/63/000/001/019/028
E191/E135

where the pressure is higher but the gas energy associated with this higher pressure tends to vanish. It is assumed that these properties of the flow are preserved also in an explosion in a non-uniform medium. A system of equations describing the motion of the gas is derived. Its approximate solution is found by a substitution of a power series in terms of a small quantity characterizing the density variation. The particular case considered is that of an explosion at the boundary between two media of uniform density. The difference in densities is small. The solutions obtained express the gas parameters in terms of the angular coordinate around the explosion center (line). There are 2 figures.

SUBMITTED: September 18, 1962

Card 2/2

L 26165-66

ACC NR: AP6006411

(N)

SOURCE CODE: UR/0413/66/000/002/0151/0152

AUTHORS: Klimenko, B. M.; Rumyantsev, B. P.

11
B

ORG: none

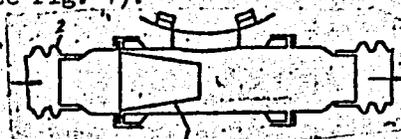
TITLE: Mouthpiece housing of a self-contained respiratory apparatus. Class 65, No. 178275

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 151-152

TOPIC TAGS: breathing apparatus, respirator, respiratory system

ABSTRACT: This Author Certificate describes a mouthpiece housing of a self-contained respiratory apparatus. The device is designed so that, in case of an emergency rise of pressure in the working tract, an ejector is activated. The ejector is set on the side of the inlet hose (see Fig. 1).

Fig. 1. 1 - ejector; 2 - inlet hose.



Orig. art. has: 1 figure.

Card 1/1 cc SUB CODE: 06/ SUBM DATE: 16Mar62

UDC: 626.025.5

NOSENKO, S.M.; RUMYANTSEV, B.P., kand.tekhn.nauk

Improving the lubrication of spindle joints on rolling mills. Metallurg 5 no.6:27-30 Je '60. (MIRA 13:8)

1. Nachal'nik listoprokatnogo tsekha zavoda im. Voroshilova (for Nosenko). 2. Voroshilovskiy gorno-metallurgicheskiy institut (for Rummyantsev).
(Rolling mills--Lubrication)

NOSENKO, S.M., inzh.; RUMYANTSEV, B.P., kand.tekhn.nauk; KOROSTASHEVSKIY, V.P.,
inzh.

Automatic load-lifting devices for sheet materials. Mekh.i avtom.
proizv. 14 no.3:37-38 Mr '60. (MIRA 13:6)
(Loading and unloading--Technological innovations)

RUMYANTSEV, B.N. (Moscow)

"On the motion of a solid having cavities filled with a viscous liquid"

Report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 64.

RUMYANTSEV, B. N. (Moscow)

"Some Selfsimilar Problems Concerning the Motion of an Incompressible Fluid Subjected to a Strong Shock Wave."

report presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

RUMYANTSEV, B. P. Cand Tech Sci -- (diss) "Study of the operation of motor
grabs." Khar'kov, 1957. 16 pp (Min of Higher Education UkSSR. Khar'kov Polytechnic
Inst im V. I. ~~St~~ Lenin), 100 copies (KL, 4-58, 83)

RUMYANTSEV, B.P.

Organization and some results of the experimental investigation
of a motor-driven grab. Trudy LMI 1:48-58 '62 (MIRA 17:7)

RUMYAN' SEV, B.P., dots., otv. red.; GULIDA, E.N., red.; KARTASHOV,
I.N., prof., red.; KIRILLOV, Yu.G., dots., red.;
MOGIL'NYI, N.I., dots., red.; SEVRYUK, V.N., dots., red.;
STAN'KO, D.G., dots., red.; TSOY, N.G., dots., red.;
KHLUS, A.A., dots., red.; POLUBICHKO, B.V., red.

[Problems of locomotive manufacture, technology of machine
manufacture and founding] Voprosy lokomotivostroeniia,
tekhnologii mashinostroeniia i liteinogo proizvodstva.
L'vov, Izd-vo L'vovskogo univ., 1964. 126 p. (MIRA 17:10)

1. Lugansk. Mashinostroitel'nyy institut.

RUMYANTSEV, B.S.

Mathematical modeling of an electric propulsion system operating on alternating current. Sud. sil. ust. no.2:139-146 '63. (MIRA 17:1)

1. Starshiy inzh. Leningradskogo vysshego inzhenernogo morskogo uchilishcha im. admirala Makarova.

RUMYANTSEV, B.S.

Using the method of mathematical modeling for the investigation of
processes in alternating current electric ship propulsion units.
Trudy TSNIIMF no.46:20-29 '62. (MIRA 16:6)
(Ship propulsion, Electric--Mathematical models)
(Transients (Electricity)--Mathematical models)

PHASE I BOOK EXPLOITATION 830

Rumyantsev, Dmitriy Alekseyevich, Engineer

Opyt izgotovleniya almazno-rastochnykh golovok (Experience With the
Manufacture of Diamond-tipped Tool Boring Heads) Leningrad, 1956. 23 p.
(Series: Leningradskiy dom nauchno-tekhnikeskoy propagandy. Informatsionno-
tekhnikeskiy listok, no. 30. Modernizatsiya i remont oborudovaniya)
6,000 copies printed.

Sponsoring Agencies: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh
i nauchnykh znaniy, Leningradskiy dom nauchno-tekhnikeskoy propagandy.

Ed.: Posternyak, Ye.F.; Tech. Ed.: Freger, D.P.

PURPOSE: This booklet is intended for tool engineers and repair workers.

COVERAGE: Foreign makes of diamond-tipped tool boring machines still widely
used in Soviet plants often create repair problems due to lack of spare parts.

Card 1/2

Experience With the Manufacture of Diamond-tipped Tool (Cont.)

830

For example, the Ex-Cello precision boring machine has a special type of ball bearing which cannot be replaced when it wears out. As a result it was necessary to develop similar boring heads of domestic design. The pamphlet gives details of construction and methods of assembling Soviet designed diamond-tipped tool boring heads. A cross section of this head is shown on page 16, Fig. 11. It is claimed that the life and precision of Soviet designed heads are not inferior to those manufactured by the Ex-Cello Company. There are no references. No Table of Contents is given. The subjects discussed are the following:

Introduction	1
1. Bearings Manufactured by the Ex-Cello Company	2
2. Diamond-tipped Tool Boring Head Manufactured by the Ex-Cello Company	3
3. Nature and Properties of Preloading in Mounting Bearings	4
4. Selection and Mounting of Bearings	7
5. Soviet-made Diamond-tipped Tool Boring Heads	17
6. Increasing the Precision of Spindle Parts	18
7. Increasing Spindle Rigidity	19
8. Assembling and Adjusting Boring Heads	20
9. Use of Boring Heads	23

AVAILABLE: Library of Congress

Card 2/2

GO/jmr
11-10-58

RUMYANTSEV, Dmitriy Alekseyevich, inzh.; POSTERNYAK, Ye.F., inzh., red.;
FREGER, D.P., tekhn.red.

[Manufacturing diamond drill heads] Opyt izgotovleniiaalmazno-rastochnykh golovok. Leningrad, 1956. 23 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Informatsionno-tekhnicheskii listok, no.30. Modernizatsiia i remont oborudovaniia) (MIRA 10:12)
(Drilling and boring machinery)

KALYATSKIY, I.I., kand. tekhn. nauk; RUMYANTSEV, D.D., inzh.

Filament voltage transformer. Vest. elektroprom. 34 no.7:70-
71 J1 '63. (MIRA 16:8)

L 04260-67 EWT(1)/EWT(m)/EWP(j)/T LJP(c) GG/RM
ACC NR: AR6010506 SOURCE CODE: UR/0196/65/000/010/B007/B007

AUTHOR: Rumyantsev, D. D.; Torbin, N. M.

42
13

TITLE: Effect of barriers on the penetration voltage of certain solid dielectrics

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 10B43

REF SOURCE: Sb. Probov dielektrikov i poluprovodnikov. M.-L., Energiya, 1964, 170-172

TOPIC TAGS: dielectric penetrability, solid dielectric, dielectric material, polyethylene, mica, metal foil

ABSTRACT: The presence of PE [polyethylene] mica, and metal foil barriers in rock salt, glass, and celluloid gives a 10-70% increase in penetration voltage. The maximum gain of penetration voltage in a solid dielectric is observed with the location of the barrier near the whisker or at a distance of 0.5 mm from it. The maximum value of the penetration voltage of celluloid in the presence of a barrier of PE-film is observed in a case of dc voltage with a positive polarity of the whisker (up to 170% without the barrier). The development of a charge in solid and gaseous dielectrics is somewhat analogous. [Translation of abstract] 4 illustrations and bibliography of 6 titles. [Tomsk Polytechnical Institute im. S. M. Kirov (Tomskiy politekhnich. in-t)] A. Petrashko

SIM CODE: 11.20
1/1

UDC:621.315.61.015.51

RUMYANTSEV, G. (UAFMC); CHERNYSHEV, V. (UAFMC)

Unusual tropospheric propagation of radio waves. Radio no. 3:
15 Mc '65. (MIRA 18:6)

RUMYANTSEV, G. (Leningrad)

Frequency band of great surprises. Radio no.7:13-15 JI '63.
(MIRA 16:7)

(Radio operators) (Amateur radio stations)

RUMYANTSEV, G., kand.med.nauk

You are working on a vibration unit... Okhr. truda i sots. strakh.
3 no.7:66-68 J1 '60. (MIRA 13:8)
(Concrete plants--Hygienic aspects)
(Vibration--Physiological effect)

LAZAREV, V.; RUMYANTSEV, G.

Youth and work in the U.S.S.R. Sots.trud 5 no.2:130-135 F
'60. (MIRA 13:6)

(Children--Employment)

RUMYANTSEV, G.

Utilization of industrial wastes and by-products is an important source for the economy of communal labor. Sots. trud 6 no. 2:63-68 F '61.

(MIRA 14:2)

(Industrial wastes)

RUMYANTSEV, G. I.

MILLET

Summer sowings of alfalfa and sainfoin with proso millet as the cover crop. Korm. baza
3, no. 6, (1952)

Monthly List of Russian Accessions, Library of Congress, September 1952. Unclassified.

RUMYANTSEV, G.I.

KLENOVA, Ye.V.; RUMYANTSEV, G.I.

D.P.Nikol'skii, outstanding worker in the field of Russian industrial hygiene; on the 35th anniversary of his death. Gig.i san. no.1:43-48
Ja '54. (MLRA 6:12)

1. Iz kafedry gigiyeny truda I Moskovskogo ordena Lenina meditsinskogo instituta.
(Nikol'skii, Dmitrii Petrovich, 1865-1918) (Industrial hygiene)

ROMYANTSEV, G. I.

"Production and Experimental Investigations Involving the Hygienic Characterization of Barium Compounds." First Moscow Order of Lenin Med Inst, Moscow, 1955
(Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' , No. 32, 6 Aug 55

EXCERPTA MEDICA Sec 17 Vol 5/1 Public Health Jan 59

193. BARITOSIS (Russian text) - Romyantsev G. I. - GIG. I SAN. 1958 4
(17-21) Illus. 3

In labourers who have been exposed to the action of the dust of barite or pure barium sulphate an occupational disease of the lungs of the type of pneumoconiosis (baritosis) may develop. The action of barite and pure barium sulphate was studied experimentally on animals with the aid of roentgenological examinations; it was possible to trace the gradual changes in the lung tissues till the appearance of small nodular shadows. Histological examinations of the lung tissue showed the presence of nodules with signs of developing sclerosis (in advanced stages) and marked lesions in bronchi, blood vessels and lymphatic system.

*Из кафедры гигиены труда I. Московского
Ордена Ленина медицинского института
имени С. М. Семенова.*

RUMYANTSEV, G.I., kand.med.nauk

Effect of industrial barium oxide dust and of pure barium sulfate dust on the lungs. Bor'ba s sil. 4:58-62 '59. (MIRA 12:11)

1. 1-y Moskovskiy ordena Lenina meditsinskiy institut im. I.M. Sechenova.

(LUNGS--DUST DISEASES)

RUMYANTSEV, G.I.

Effect on the organism of general vibration and its hygienic significance. Uch. zap. Mosk.nauch-issl.inst.san.i gig. no.7:3-9 '60.
(MIRA 15:2)

(VIBRATION__PHYSIOLOGICAL EFFECT)

ARKAD'YEVSKIY, A.A.; MAYOROV, V.P.; RUMYANTSEV, G.I.

Methodological problems in the measurement and evaluation of vibrations
and noise. Uch. zap. Mosk.nauch-issl.inst. san.i gig. no.7:17-25 '60.
(MIRA 15:2)

(NOISE__MEASUREMENT) (VIBRATION__MEASUREMENT)

ACC NR: AP6012862

SOURCE CODE: UR/0240/66/000/004/0103/0105

AUTHOR: Pushkina, N. M.; Rumyantsev, G. I.; Tanbovtseva, A. M. 10
B

ORG: Moscow Scientific-Research Institute of Hygiene Im. F. F. Erisman (Moskovskiy nauchno-issledovatel'skiy institut gigiyeny)

TITLE: Experimental studies on the effect of general vibration² on the vitamin supply of the body

SOURCE: Gigiyena i sanitariya, no. 4, 1966, 103-105

TOPIC TAGS: vitamin, biologic metabolism, biologic vibration effect, dog, rabbit, medical experiment, human physiology

ABSTRACT: The present authors discovered earlier that there is a reduced concentration of vitamins C, B₁, and B₂ in personnel exposed to total body vibration while working in reinforced-concrete plants. In order to confirm the results of the earlier work and to obtain material for a hygienic evaluation of total body vibration the authors performed 10 series of tests on rabbits and dogs. Vibration with the following parameters was studied: frequency of 20 cps with amplitudes of 50, 200, and 400 microns; 50 cps and 15, 50, 200, and 750 microns; and 75 cps and 15, 20, and 200 microns. The animals were subjected to vibration for 4 hr daily for 30-60 days. Vitamin levels and other biochemical indices were studied.

Card 1/3

UIC: 612.015.7.014.45-08

L 39513-66

ACC NR: AP6012862

Table 1. Vitamin A deficiency
 & vitamins in rabbits subjected to general vibration

Vitamins	Control group		Vib group		t ₁ P ₁	t ₂ P ₂
	Mean	SD	Mean	SD		
Group 1						
Ascorbic Acid (in mg)	1.51±0.04	0.11±0.02	0.57±0.03	0.05	5.1	3.2
Thiamine (in μg)	17.0±1.4	2.0±0.5	11.9	1.5	2.7	2.9
Pyruvic Acid (in mg)	2.30±0.26	0.31±0.11	1.17±0.16	0.15	2.3	1.1
Riboflavin (in μg)	171.6±14.7	14.0±25.5	112.6±6.4	10.5	2.6	2.3
Niacin (in mg)	149.4±21.1	13.5±22.1	19.8±4.1	4.5	2.2	2.1
Group 2						
Ascorbic Acid (in mg)	0.21±0.01	0.02±0.04	0.59±0.04	0.05	3.2	1.9
Thiamine (in μg)	16.0±0.4	0.9±0.5	19.3±18.3	15.5	1.8	1.6
Pyruvic Acid (in mg)	1.3±0.03	0.04±0.01	1.45±0.29	0.25	2.1	2.1
Riboflavin (in μg)	121.4±10.2	12.0±20.1	113.0±15.9	11.5	1.7	0.9
Niacin (in mg)	208.2±21.0	18.0±10.0	191.3±53.1	45.5	0.2	0.5
Group 3						
Ascorbic Acid (in mg)	0.32±0.01	0.02±0.04	0.41±0.02	0.05	1.3	1.3
Thiamine (in μg)	11.4±0.1	0.4±0.1	11.6±21.4	18.5	0.5	1.2
Pyruvic Acid (in mg)	0.37±0.01	0.01±0.01	0.15±0.07	0.05	2.2	2.7
Riboflavin (in μg)	172.5±14.5	16.1±17.7	140.8±14.1	14.5	0.9	0.9
Niacin (in mg)	190.4±12.6	11.8±11.8	126.6±62.0	25.5	0.5	0.2

Note: t₁ is the criterion in comparing group 2 with the control group;
 t₂ is the criterion in comparing group 3 with Group 1.

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ACC NR: AP6012862

The vitamin supply was determined from the content of ascorbic acid in the blood and the excretion of vitamins in the urine. The results of three series of experiments in which rabbits were exposed to vibration of various frequencies for 4 hr daily for 30 days are given in Table I. The table shows that there is a direct relationship between the vitamin supply in the body and the vibration parameters. Tests with 6 dogs produced similar results. The observed changes in vitamin metabolism accompanying exposure to total body vibration indicate disruption of the metabolism of ascorbic acid, thiamine, riboflavin, and N'-MNA. Orig. art. has: 2 tables. (08)

SUB CODE: 06/ SUBM DATE: 19Feb65/ ORIG REF: 006/ OTH REF: 003/ ATD PRESS:

5005

Card 3/3 vmb

MEL'KUMOVA, A.S., prof.; RUMYANTSEV, G.I., st. nauchn. sotr.;
SHITSKOVA, A.P., otv. red.

[Vibration sickness in concreters and measures for its control; manual for occupational disease specialists, neuropathologists, hygienists, and physicians of polyclinics and medical and public health centers] Vibratsionnaya bolezn' betonschikov i mery bor'by s neiu; posobie dlia profpatologov, nevropatologov, vrachei-gigienistov, vrachei poliklinik i mediko-sanitarnykh chastei. Moskva, Mosk. nauchno-issl. in-t gigieny, 1965. 102 p.
(MIRA 18:10)

ACCESSION NR: AP4038143

S/0240/64/000/005/0044/0048

AUTHOR: Sinitsy*n, S. N.; Romyantsev, G. I.; Voronova, K. V.

TITLE: Some changes in the carbohydrate metabolism caused by total-body vibration

SOURCE: Gigiyena i sanitariya, no. 5, 1964, 44-48

TOPIC TAGS: vibration, carbohydrate metabolism, sugar blood content, glycogen blood content, glykemic curve

ABSTRACT: Experiments were conducted with rabbits and dogs for 70—85 days. The rabbits were exposed to total-body vibration with amplitudes of 15, 20, and 200 μ and a frequency of 75 cps, and the dogs were exposed to total-body vibration with an amplitude of 750 μ and a frequency of 50 cps. The experimental data showed that a single exposure to total-body vibration with an amplitude of 200 μ and a frequency of 75 cps for a period of 4 hours decreased the amount of sugar and glycogen in the blood of the test animals. Repeated exposure to the same vibration resulted in a more significant decrease of the sugar and glycogen blood content in the test animals;

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ACCESSION NR: AP4038143

namely, the amount of sugar decreased by 18—27.5 mg% and glycogen by 1.4—3.25 mg%. These changes, however, were only temporary, and on the day following the exposure the sugar level returned to normal and the amount of glycogen returned to normal a little later. Repeated exposure (20 times) to vibration resulted in a decrease of the sugar level to 83—90 mg%; after 30 times to 82—85 mg%; and after 40 times to 74—85 mg%. The glycogen content of the blood decreased correspondingly to 11.5—9.7 mg%. In animals exposed 70 times to total-body vibration with an amplitude of 50 μ and a frequency of 75 cps, no marked changes in the blood content of sugar and glycogen were detected. In rabbits exposed to vibration with an amplitude of 15 μ and a frequency of 75 cps, no marked changes were observed either at a single exposure or at repeated exposures. The following results were obtained in experiments with dogs exposed to total-body vibration with an amplitude of 750 μ and a frequency of 50 cps: After a single exposure for a period of 4 hours, a slight

Cont 2/3

ACCESSION NR: AP4038143

decrease of the sugar content in the blood was observed (82 mg% compared to normal 89.5 mg%). After repeated exposure to vibration (55 times), the sugar level in the blood of the dogs decreased to 62 mg%, while the sugar level in the control group remained at the normal amount of 80 mg%; the glycogen level in the test animals, after repeated exposure to vibration, decreased considerably. Experimental data indicate that the action of total-body vibration with an amplitude of 200 μ and a frequency of 75 cps caused changes in the glykemic curves and a reduction in the sugar and glycogen blood contents in the test animals. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: Moskovskiy nauchno-issledovatel'skiy institut gigiyeny* im. F. F. Erismana (Moscow Scientific Research Institute of Hygiene)

SUBMITTED: 13Feb63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: LS

NO REF SOV: 002

OTHER: 001

Card 3/3

L 24680-66 EWT(1) SCTB DD

ACC NR: AP6014389

SOURCE CODE: UR/0391/66/000/004/0006/0009

AUTHOR: Rumyantsev, G. I. (Moscow); Chumak, K. I. (Moscow)

ORG: Institute of Hygiene im. F. F. Erismana (Institut gigiyeny)

TITLE: Osseous changes in the spine of concrete workers subjected to high-frequency whole-body vibration

SOURCE: Gigiyena truda i professional'nyye zabolevaniya, no. 4, 1966, 6-9 and insert opposite p. 8

TOPIC TAGS: vibration effect, spine, whole body vibration

ABSTRACT: X-ray investigations of the lumbar area of 78 industrial workers engaged in the manufacture of prefabricated, reinforced concrete showed pathological changes in the majority of workers. These workers had been exposed to whole-body vertical vibration (frequency 50 cps, amplitude 0.1-0.8 mm) for 27-33% of each working day for 2-5 yr. Neurological investigations revealed lumbar-sacral radiculitis in 26 subjects, first-degree vibration sickness in 8 subjects, and preliminary signs of vibration sickness in 14 others. The type and frequency of pathological changes in spinal bone and cartilage are shown in the table. It was concluded that these

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UDC: 613.644+612.75.014.45

L 24680-66

ACC NR: AP6014389

Table 1. Data of spinal x-ray studies of concrete workers and control group

Workers examined	No. of subjects	Age	Period of service (yr)	Number of subjects with pronounced changes							
				Spondylitis deformans		Intervertebral osteo-chondrosis		Calcification of intervertebral disks		Change in the type of cartilage modules (Schmorl's nodes)	
				Total	%	Total	%	Total	%	Total	%
Concrete workers	78	24-36	2-5	27	50	8	14,8	12	22,2	7	13
Cement loaders (Control group)	62	25-40	2-5	4	7,7	0	0	0	0	0	0

pathological changes are due to the effect of high-frequency whole-body vibration, since such disorders are either rare or occur commonly in people 50-60 yr old. Orig. art. has: 1 table and 4 figures. [JS]

SUB CODE: 05, 06/ SUBM DATE: 14Jan64/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 4249

Card 2/2 FW

PHASE I ZONAL REPLICATION.

1. P. I., Ed., Professor

Biologiya redkikh metallov (Toxicology of Rare Metals) Moscow, Medgiz, 1963. 335 p. 1500 copies printed.

R. S. Khamidullin; Tech. Ed.: Yu. S. Bel'chikova.

2. To provide information on the toxic effects of rare metals.

The chemistry and industrial applications of rare metals and their compounds are discussed. The clinical picture and toxicology of rare-metal poisonings is also given. There are 307 references.

Ch. II. Experimental Studies of the Effect on an Organism of Rare, Dispersed, and Other Metals Used in Industry and Their Compounds.

11.	Nickel. O. Ya. Mogilevskaya	151
12.	Cobalt. Z. S. Kaplun (Deceased)	164
13.	Barium compounds. G. I. Romyantsev	176
14.	Zinc and Zinc oxide. T. Ya. Mogilevskaya	187
15.	Rare earths. O. Ya. Mogilevskaya and N. I. Raikhlin	195

RUMYANTSEV, G.N., redaktor; BORISOV, N.I., redaktor; BUYANTUYEV, B.R.,
redaktor; KROTOV, V.A., redaktor; RAZUMOV, I.M., redaktor;
KHADALOV, P.I., redaktor; SHNIPER, R.I., redaktor; AKHANOV,
TS.B., tekhnicheskiy redaktor.

[Studies on the production forces of the Buryat-Mongolian
A.S.S.R.] Materialy po izucheniu proizvoditel'nykh sil
Buriat Mongol'skoi ASSR. Ulan-Ude, Buriat-Mongol'skoe kn-vo.
no.1. 1954. 425 p. (MIRA 9:5)
(Buryat-Mongolia--Economic geography)

RUNYANTSEV, G.S.

Composition and properties of newly found minerals of the magnetite-jakobsite series in the Magnetitovoye deposit (Buryat A.S.S.R.). Dokl. AN SSSR 164 no.5:1143-1146 O '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. Submitted March 25, 1965.

GRUDEV, A. P.; RUMYANTSEV, G.S.

Morpho-granulometric study of ore minerals as a preliminary estimation of the quality of ores. Vest.Mosk.un.Ser.4: Geol. 17 no.2:67-70 Mr-Apr '62. (MIRA 15:5)

1. Kafedra mineralogii Moskovskogo universiteta.
(Sayan Mountains--Ores--Sampling and estimation)

KOLESIKOV, L.V.; HUKHANTSEV, G.M.

Thermomagnetic analysis of the intermediate members on the magnetite-jakobsite isomorphous series from the Eravninskiye iron ore deposits of the Buryat A.S.S.R. Dokl. AN SSSR 161 no.5:1184-1187 Ap '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet. Submitted October 19, 1964.

LISITSYN, A.Ye.; MALINKO, S.V.; RUMYANTSEV, G.S.

New finds of frolovite and pentahydroborate. Dokl. AN SSSR
164 no.1:171-173 S '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya i Moskovskiy gosudarstvennyy universitet. Submitted
May 17, 1965.

RUMYANTSEV, G.T.

Alder

Fortifying inferior young alder trees. Les, khoz. no. 5, May, 1952

9. Monthly List of Russian Accessions, Library of Congress, August 1952? Unclassified.

L 61477-65 EWT(d) IJP(c) DM

ACCESSION NR: AP5020185

UR/0089/65/018/005/0459/0463

AUTHOR: Rumyantsev, G. Ya.

TITLE: General precise solution of Boltzmann equations in spherical harmonics

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 459-463

TOPIC TAGS: Boltzmann equation, harmonic function, approximation, harmonic analysis

ABSTRACT: A general precise solution was derived for the one-velocity Boltzmann equation system in spherical harmonics. The general expression was derived without any approximations and was developed within the limitations of arbitrary functions. The ordinary P_N approximations within their limiting conditions can be easily developed from the general solution. Orig. art. has: 32 formulas.

ASSOCIATION: none

SUBMITTED: 18May64

ENCL: 00

SUB CODE: MA, GP

NR REF SOV: 005

OTHER: 001

NA

PR
Card 1/1

ACC NR: AP7000793

(A,N)

SOURCE CODE: UR/0089/66/021/005/0384/0384

AUTHOR: Rumyantsev, G. Ya.

ORG: none

TITLE: Solution of diffusion equation in periodic lattices with the aid of trigonometric series

SOURCE: Atomnaya energiya, v. 21, no. 5, 1966, 384

TOPIC TAGS: neutron diffusion, differential equation solution, Fourier series, nuclear reactor characteristic

ABSTRACT: This is a summary of article no. 110/3357, submitted to the editor and filed but not published in full. The author describes an approximate method of solving the diffusion equation in cells of planar one-dimensional lattices with boundary conditions of general type, formulated by the author earlier (Atomnaya energiya v. 13, 556, 1962). The solution is based on diffusion-equation properties derived in the earlier paper. The solution obtained for one cell can be readily extended to the entire lattice and makes it possible to determine in each point of the medium both the true and the averaged macroscopic value of the distribution function. A figure showing the results of calculation of a two-zone cell is presented. The calculation agrees well with the exact solution, and the labor involved in the proposed method is practically independent of the number of zones in the cell. It can be used to calculate two-dimensional cells with blocks of complicated form. Orig. art. has: 1 figure and 3 formulas.

SUB CODE: 18/ SUBM DATE: 00/ ORIG REF: 001.

UDC: 621.039.51.12

Card 1/1

ACCESSION NR: AT4019034

S/0000/63/000/000/0085/0089

AUTHOR: Rumyantsev, G. Ya.

TITLE: Calculation of the diffusion of neutrons in a two-dimensional problem by means of the P_2 approximation

SOURCE: Voprosy* fiziki zashchity* reaktorov; sbornik statey (Problems in physics of reactor shielding; collection of articles). Moscow, Gosatomizdat, 1963, 85-89

TOPIC TAGS: nuclear reactor, reactor shielding, neutron, neutron diffusion, two dimensional problem, P_2 approximation, spherical harmonic method, diffusion theory

ABSTRACT: The author considers the application of the P_2 -approximation to the problem of calculating neutron diffusion in heterogeneous media in those cases in which the diffusion occurs not only in a direction perpendicular to the boundaries, but also along these boundaries. Here the differences between the P_2 - and P_1 approximations are of maximum significance. It is pointed out that, as compared with the P_1 -approximation (elementary theory of diffusion); the P_2 -approximation of the spherical harmonic method is of a higher order. The diffusion theory based on the P_2 -approximation, which in the majority of cases is more accurate than

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ACCESSION NR: AT4019034

the conventional theory of diffusion, is found to be not as complex as the P_3 -approximation, while for single-dimensional problems it is almost equivalent to the P_1 -approximation in terms of complexity. It is assumed in the article that the sources are isotropic, with their power described by the function S . As a result of the solution of the general equations of the method of spherical harmonics in the P_2 -approximation, the following relation is obtained for the diffusion flow I and the integral flow ϕ :

$$\left(\frac{3}{\Sigma_2} \nabla^2 - \Sigma_1\right) I = \text{grad} \left[\phi \left(1 + \frac{\Sigma_0}{\Sigma_2}\right) - \frac{S}{\Sigma_2} \right] \quad (1)$$

The second relationship is the conventional neutron balance equation:

$$\text{div } I + \Sigma_0 \phi = S. \quad (2)$$

The elimination of I from these two equations leads to the following equation for function ϕ :

$$\nabla^2 \left[\phi \left(1 + \frac{4\Sigma_0}{\Sigma_2}\right) - \frac{4S}{\Sigma_2} \right] - \Sigma_0 \Sigma_1 \phi + \Sigma_1 S = 0. \quad (3)$$

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ACCESSION NR: AT4019034

which may be rewritten as

$$\nabla^2 \bar{\Phi} - \kappa_0^2 \bar{\Phi} + \bar{\Sigma}_1 \bar{S} = 0, \quad (4)$$

$$\bar{\Phi} = \left[\Phi \left(1 + \frac{4\Sigma_0}{\Sigma_2} \right) - \frac{4S}{\Sigma_2} \right];$$

where

$$\kappa_0^2 = \frac{\Sigma_0 \Sigma_1}{1 + 4\Sigma_0/\Sigma_2}; \quad \bar{S} = \frac{S}{1 + 4\Sigma_0/\Sigma_2}; \quad (5)$$

It is pointed out that Eq. (4) does not differ in form from the conventional diffusion equation. An important peculiarity of Eq. (1) is the fact that, unlike Fick's law, it is differential with respect to I. Consequently, there may exist a component I*, representing the solution of the homogeneous equation

$$\frac{3}{\Sigma_2} \nabla^2 I^* - \Sigma_1 I^* = 0. \quad (6)$$

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ACCESSION NR: AT4019034

The solution of I^* approximates the non-asymptotic angular distribution, caused by the first paths of the neutrons near the boundaries. It introduces into the general solution additional coefficients, thanks to which it is possible to ensure the continuity of not only the normal component of the diffusion stream, but also of the tangential components. The continuity of all components of the diffusion stream is of importance when determining the mean effective macroscopic diffusion factor of the medium. In the second part of the article, on the basis of a plane lattice, the author illustrates the scheme for the calculation of the macroscopic diffusion factor for a direction parallel to the layers of the medium. Neutron diffusion in the transverse direction is rather well described even in the P_1 -approximation; consequently, this aspect of the problem is not considered in connection with the P_2 -approximation in the present study. Orig. art. has: 33 formulas*

ASSOCIATION: none

SUBMITTED: 14Aug63

DATE ACQ: 27Feb64

ENCL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 000

Card 4/4

RUMYANTSEV, G.Ya., inzh.

~~Heavy-duty three-rotor snowplows.~~ Izobr.v SSSR 2 no.10:17-20 0 '57
(MIRA 10:11)

(Railroads--Snowplows)

RUMYANTSEV, G.Ya.

Boundary conditions in the spherical harmonics method. Atom. energ.
10 no.1:26-34 Ja '61. (MIRA 13:12)
(Spherical harmonics)

RUMYANTSEV, G.Ya., inzhener.

Course-porous two-layer ceramic blocks. Izobr. v SSSR.1 no.2:24-
25 Ag '56. (MIRA 10:3)
(Ceramic materials)

RUMYANTSEV, G.Ya.

On defining the "invention" concept. Izobr. v SSSR 2 no.1:27-30 '57.
(Patent laws and legislation) (Inventions) (MIRA 10:4)

S/089/63/010/001/004/020
B006/B063

26.2222

AUTHOR: Rumyantsev, G. Ya.

TITLE: Boundary Conditions in the Method of Spherical Harmonics

PERIODICAL: Atomnaya energiya, 1960, Vol. 10, No. 1, pp. 26-34

TEXT: The method of spherical harmonics has proved very useful for solving equations of motion. The method consists in that the desired distribution function $F(\vec{r}, \vec{\Omega})$ is expanded in a series of spherical harmonics. The expansion coefficients, which depend on the space coordinates only, are interrelated by an infinite set of differential equations; if expansion is discontinued after the Nth-order term, this set will become finite and can be solved analytically in a number of cases. The Nth approximation is then obtained and denoted by P_N . Uniqueness of this solution can be secured by a sufficient number of boundary conditions. The present article is concerned with the determination of these boundary conditions. The heterogeneous case is considered, i.e., a scattering medium of any geometry, which has a common boundary with another scattering

Card 1/3

Boundary Conditions in the Method of
Spherical Harmonics

S/089/60/010/001/004/020
B006/B063

medium. Within the one-group theory, the spatial-angular neutron distribution function $F(\vec{r}, \vec{\Omega})$ is first represented by the method of spherical harmonics, a vectorial distribution function $F(\vec{r}, \vec{\Omega}) = \vec{\Omega} F(\vec{r}, \vec{\Omega})$ being introduced. $\vec{F}(\vec{r}, \vec{\Omega}) = \sum_{n=0}^{\infty} \vec{F}_n(\vec{r}, \vec{\Omega})$ and $F(\vec{r}, \vec{\Omega}) = \sum_{n=0}^{\infty} (2n+1) Y_n(\vec{r}, \vec{\Omega})$. The source density distribution is formulated similarly: $S(\vec{r}, \vec{\Omega}) = \sum_{n=0}^{\infty} S_n(\vec{r}, \vec{\Omega})$. The boundary conditions for the approximation P_N are determined next; these conditions holding at the interface of the two scattering media are sufficient for determining solutions in any approximation (viz., even and odd N). The possibility of applying even approximations (P_2, P_4, \dots) is very important for practical purposes. Thus, e.g., the not very extensive approximation P_2 may serve to improve the elementary diffusion theory without complicating it. A discussion shows the great advantages of the approximation P_2 ; which, although practically not yet in use today, yields more accurate results than P_1 and, in addition, is much simpler than P_3 .

Card 2/3

Boundary Conditions in the Method of
Spherical Harmonics

S/089/61/010/001/004/020
B006/B063

V. V. Orlov, Candidate of Physical and Mathematical Sciences, is thanked
for interest and discussions, and E. I. Gladysheva for her assistance. ✓
There are 1 table and 5 references: 4 Soviet and 1 US.

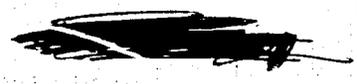
SUBMITTED: March 9, 1960

Card 3/3

RUSSIAN (Soviet) U.S.S.R.
MORDZOV, S.A., kandidat tekhnicheskikh nauk; BORISOV, V.I., inzhener;
RUMYANTSEV, G.Ya., inzhener.

The SUEG-2 automotive unit for paving soil surfaces. Izobr.v
SSSR 1 no.4:8-10 0 '56. (MIRA 10:3)
(Road machinery)

RUMYANTSEV, G. Ya



Handlungen bei der Kugelfunktionsmethode

G. J. Rumyantsev

Die Kugelfunktionsmethode ist eine Methode zur Lösung von Randwertproblemen für Laplace'sche Funktionen in einem Kreis. Sie beruht auf der Entwicklung der Funktion in eine Reihe von Kugelfunktionen...

Zur Lösung der Laplace'schen Gleichung in einem Kreis... Die Kugelfunktionsmethode ist eine Methode zur Lösung von Randwertproblemen für Laplace'sche Funktionen in einem Kreis...

Die Methode der Kugelfunktionen wird zum ersten Mal in dem Fall des Randwertproblems für Laplace'sche Funktionen in einem Kreis... Die Kugelfunktionsmethode ist eine Methode zur Lösung von Randwertproblemen für Laplace'sche Funktionen in einem Kreis...

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Zur Lösung der Laplace'schen Gleichung in einem Kreis... Die Kugelfunktionsmethode ist eine Methode zur Lösung von Randwertproblemen für Laplace'sche Funktionen in einem Kreis...

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RUMYANTSEV, G. Ya.

Boundary conditions for the solution of Boltzmann's equation in
periodic lattices. Atom. energ. 14 no.4:371-374 Ap '63.

(MIRA 16:3)

(Boundary value problems) (Nuclear reactors)

RUMYANTSEV, G. Ya.

Calculation of neutron diffusion in periodic lattices. Atom.
energ. 13 no.6:556-562 D '62. (MIRA 15:12)
(Neutrons) (Diffusion) (Crystal lattices)

RUMYANTSEV, G. YA

AID Nr. 978-5 28 May

BOUNDARY CONDITIONS FOR SOLVING THE BOLTZMANN EQUATION IN PERIODIC LATTICES (USSR)

Rumyantsev, G. Ya. Atomnaya energiya, v. 14, no. 4, Apr 1963, 371.
S/089/63/014/004/005/019

An approach used previously by the author for solving diffusion equations for heterogeneous periodic lattices has been extended to the exact one-velocity kinetic Boltzmann equation. Exact boundary conditions are established which can limit the solution of the equation to a single lattice. Also, due to the general properties of the established boundary conditions, the kinetic equation can be solved by an arbitrary approximate method in accordance with the accuracy required and practical convenience. The specific solutions found for one lattice can be used for obtaining a general solution in all media or for calculating the characteristics of homogeneous media. [AS]

Card 1/1

RUMYANTSEV, G. (UALDZ, g. Leningrad)

Amplitude modulation with acontrolled carrier. Radio no.2:42-44
F '61. (MIRA 14:9)
(Modulation (Electronics))

VOLKOV, A.M.; KANDAUROVA, Ye.I.; RUMYANTSEV, G.I.

Experimental study of the effect of general vibrations on the organism.
Uch. zap. Mosk. nauch.-issl.inst.san. i gig. no.7:10-13 '60.

(MIRA 15:2)

(VIBRATION__PHYSIOLOGICAL EFFECT)

RUSSIAN BOOK EXPLOITATION SOV/5357

Panasenkova, Ye. I., ed.

Isledovaniya kriticheskikh parametrov reaktornykh sistem: sbornik statey (Study of Critical Parameters of Reactor Systems; Collection of Articles) Moscow, Gosatomizdat, 1960. 117 p. Errata slip inserted. 3,600 copies printed.

Tech. Ed.: M.A. Vlasova.

PURPOSE: This collection of articles is intended for nuclear physicists and engineers of nuclear power plants.

COVERAGE: The book contains previously unpublished original articles concerned with the theoretical calculation of neutron fluxes and of critical parameters (critical masses and volumes) of various reactor systems: uranium-graphite, uranium-beryllium, and water mixtures of uranium and plutonium. Individual articles present tables and graphs used in the determination of the dependence of critical parameters on the relative concentration and the character of the fissionable material and the moderator, as well as on fuel enrichment for a wide range of neutron energy spectra. The following are mentioned: P.A. Gavrilov (scientific editor of the collection), and S.I. Sokolov, L.M. Spakova, A. Ya. Rymine, R.P. Roschina and V.S. Vladimirov (compilers of Table 1, table of values of coefficients k_{eff} and β). References accompany individual articles.

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RUBYANTSEV, G. YE.

Medicine

Tissue therapy. Rostov-na-Donu, Oblastnoe
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9. Monthly List of Russian Accessions, Library of Congress, October, 1952 ~~1953~~, Uncl.

1949. Treatment with Conserved Tissue by a Modification of Filatov's Method. (Лечение консервированными тканями по измененной методике В. П. Филатова) G. E. RUMANTSEV. Клиническая Медицина [Klin. Med., Mosk.] 28, No. 1, 28-33, Jan., 1950.

A review of Filatov's work on tissue therapy and his conclusions is given. A piece of tissue conserved by cold storage continues to live, reorganizes, and produces biologically stimulating substances. The results of Filatov's therapy in chronic inflammations resistant to other methods of treatment are discussed. Not all conserved tissues exert a beneficial effect on the affected organism; use of certain tissues combined with other therapeutic measures gives better results.

The author prepared the tissues in special media and added honey to them which, in his experience, gave better and more lasting results. The tissue was mainly taken from large animals (sheep and cows); the following tissues and organs were used: ovaries, spleen, adrenal gland, mammary gland, heart, and skeletal muscle. Before implantation the tissue was autoclaved, an average piece weighing 3 to 5 g. It was implanted into the abdominal wall and this procedure could be repeated if necessary. In bronchial asthma implants of adrenal gland gave the best results, in chronic inflammation

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implants of spleen, in fibroids of the uterus, mammary gland. Several case histories are given to show the beneficial effect of the implants. The main effects seemed to be a stimulation of regeneration and an analgesic effect. No ill effect was seen during or after treatment
N. Chatelain

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Vol 8 1950

RUMYANTSEV, I., polkovnik

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AYMANOV, K. (Moskva); RUMYANTSEV, I. (Moskva)

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(Photoelectric cells)
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RUMYANTSEV, I.F.

1. SHKINEV, M.N.; OSTPOVSKIY, K.I.; RUMYANTSEV, I.F.

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Rumyantsev, I.A.

AUTHOR: Rumyantsev, I.A., Korsunskiy, M.I.

48-10-15/20

TITLE: The $L_{\beta 6}$ - and $L_{\gamma 5}$ -Lines in Cu- and Zn-Spectra (Linii $L_{\beta 6}$ i $L_{\gamma 5}$ v spektrakh Cu i Zn)

PERIODICAL: Izvestiya AN SSSR Seriya Fizicheskaya, 1957, Vol. 21, Nr 10, pp. 1435-1437 (USSR)

ABSTRACT: The first results obtained by tests carried out in the L-series of Cu- and Zn X-ray spectra are described. This paper was intended to find out whether in Cu and Zn in the solid state the $L_{II}, III-N_I$ transitions exist. The line $L_{\beta 6}$ corresponds to the L_{III-N_I} transition and the line $L_{\gamma 5}$ to the L_{II-N_I} transition. The investigations of the spectra were carried out in a powerful vacuum X-ray spectrograph with bent mica crystal and photorecording. The dependence of the appearance of Cu- and Zn spectra on the conditions of excitation was investigated. It is shown that the appearance of the L spectrum in the case of Cu and Zn depends to a considerable extent on the conditions of the excitation of the spectrum. Therefore all data for the L-series of elements with an average atomic number (about 26 Fe to 35 Br) must be re-examined. In the Cu- and

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RUMYANTSEV, I. A.

24(0): 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215
 Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni
 D.I. Mendeleeva
 Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific
 Research Abstracts; Collection of Articles, Nr 2) Moscow,
 Standartgiz, 1990. 139 p. 1,000 copies printed.
 Additional Sponsoring Agency: USSR. Komitet standartov, mer i
 izmeritel'nykh priborov.
 Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.
 PURPOSE: These reports are intended for scientists, researchers,
 and engineers engaged in developing standards, measures, and
 gages for the various industries.
 COVERAGE: The volume contains 128 reports on standards of measure-
 ment and control. The reports were prepared by scientists of
 institutes of the Komitet standartov, mer i izmeritel'nykh
 priborov pri Sovete Ministrov SSSR (Commission on Standards,
 Measures, and Measuring Instruments under the USSR Council of
 Ministers). The participating institutes are: VNIM -
 Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I.
 Mendeleeva (All-Union Scientific Research Institute of Met-
 rology); VNIITs (VNIITs) in Leningrad; Sverdlovsk branch
 of this institute; VNIITs in Novosibirsk; VNIITs in
 Institut Komiteta standartov, mer i izmeritel'nykh priborov
 (All-Union Scientific Research Institute of the Commission
 on Standards, Measures, and Measuring Instruments);
 izmeritel'nykh priborov (Moscow State Institute of Measures
 and Measuring Instruments) October 1, 1955; VNIIPRI -
 Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh
 i radiotekhnicheskikh izmereniy (All-Union Scientific
 Research Institute of Physicotechnical and Radio-engineering
 Measurements) in Moscow; KNDIMIP - Khar'kovskiy gosudarstvennyy
 institut mer i izmeritel'nykh priborov (Kharkov State Institute
 of Measures and Measuring Instruments); and KNDIMIP - Novosil-
 (Novosibirsk State Institute of Measures and Measuring Instru-
 ments). No personalities are mentioned. There are no references.
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KORSUNSKIY, M.I.; RUMYANTSEY, I.A.

L_β and L_γ lines in copper and zinc spectra. Issl. po zharopr.
splav. 3:249-251 '58. (MIRA 11:11)
(Copper--Spectra) (Zinc--Spectra)

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λ -spectra of Zn in alloys of the Cu-Zn system. Opt. i spektr.
7 no. 6:350-352 D '59. (MIRA 14:2)
(Zinc--Spectra) (Copper-zinc alloys--Spectra)

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S/048/60/024/04/04/009
B006/B017

24.6300
AUTHORS:

Genkin, Ya. Ye., Rumyantsev, I. A.

TITLE:

Consideration of Apparatus Distortions and the Widths of the Inner Levels of Dispersion Type in Emission Spectra!

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 4, pp. 384-392

TEXT: The present article is a reproduction of a lecture delivered at the 4th All-Union Conference on X-Ray Spectroscopy (Rostov-na-Donu, June 29 - July 6, 1959). The interaction between quanta and a device brings about a distortion of spectral lines. The experimentally determined shape of the spectrum $F(x)$ is related to the actual shape of the spectrum

$f(x)$ by the equation $F(x) = \int_{-\infty}^{+\infty} f(z) \psi(x-z) dz$, where $\psi(x-z)$ is the

distortion function. In a spectrograph with a curved crystal, distortion has almost the form of dispersion. By means of the normalization

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Consideration of Apparatus Distortions and the Widths of the Inner Levels of Dispersion Type in Emission Spectra S/048/60/024/04/04/009 B006/B017

$\int_{-\infty}^{+\infty} \psi(x-z) dz = 1$ the following integral equation is then obtained:

$$F(x) = \frac{1}{\pi\beta} \int_{-\infty}^{+\infty} \frac{f(z) dz}{1 + \left(\frac{x-z}{\beta}\right)^2} \quad (4) \quad (\beta - \text{distortion parameter}).$$

The present paper deals with its solution. The authors give an approximation method similar to those published in previous papers. It is based on the approximation of the second power of the function $f(x)$ by means of polynomials. First, the method of columns is discussed. Integration of

equation (4) leads to $F_k = \sum_{i=1}^n C_{ki} f_i$, where f_i and F_k are the values of the true and the distorted functions, with

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Consideration of Apparatus Distortions and the Widths of the Inner Levels of Dispersion Type in Emission Spectra

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B006/B017

$C_{ki} = \frac{1}{\sqrt{\beta}} \left(\arctan \frac{k-i+1/2}{\beta} - \arctan \frac{k-i-1/2}{\beta} \right)$. The solution of the above system makes it possible to obtain the inverse matrix $f_i = \sum_{k=1}^n p_{ik} F_k$ by

means of which the actual shape of the spectrum can be calculated from the one found experimentally. The approximation of the actual curve by means of finitely wide columns, however, is rather inexact (Fig. 1). In the following, the parabola method is discussed. It is based on the principle that $f(x)$ is expanded into a series according to powers of $(x-1)$, and that the first three terms of this expansion are used. Again,

$F_k = \sum_{i=1}^n a_{ki} f_i$, and the very extensive formulas for a_{ki} are written down

explicitly and the matrices $\|a_{ki}\|$ and $\|b_{ik}\|$ (from $f_i = \sum_{k=1}^n b_{ik} F_k$) are tabulated (Tables 1 and 2). In the following, a possibility of improving this approximation is discussed (the occurring matrices are again

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ACCESSION NR: AP5025117

UR/0208/65/005/005/0932/0936

AUTHOR: Rumyantsev, I. A. (Moscow)

31
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B

TITLE: A program for solving a system of integral equations of Volterra type of the second kind

16.44.55

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 5, no. 5, 1965, 932-936

TOPIC TAGS: Volterra equation, algorithm, *integral equation*

ABSTRACT: A system of equations of the form

$$\varphi_i(x) = f_i(x) + \sum_{j=1}^m \int_a^x K_{ij}(x, y) \varphi_j(y) dy, \quad i=1, 2, \dots, m.$$

was considered, where the two constants a, b were given, as well as m continuous functions $f_i(x)$, and m^2 continuous kernels $K_{ij}(x, y)$ with $a \leq x \leq b$ and $a \leq y \leq x$. A solution of the above system was to be found to within a given accuracy of ϵ_i , i.e., an algorithm for determining the value of each of the m functions $\varphi_i(x)$

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